

REMARKS

Claims 1 through 7 have been cancelled. Claims 8 through 23 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention. Claims 24 through 32 currently stand rejected.

On page 2 of the Office Action, the Examiner rejects claims 24 – 32 under 35 USC 112, first paragraph as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. Specifically, the Examiner objects to the use of the term “activated with an alkali” in independent claim 24, stating that it is not used in the specification.

Applicant respectfully disagrees. The term “alkali” is well known in the chemical arts, and anyone of ordinary skill would be aware of its well-established definition. The applicant has identified one such acceptable alkali NaOH that can be used in conjunction with the current invention. One of ordinary skill in the art would recognize that other alternatives, could be substituted for sodium hydroxide, and similar results could be expected.

On page 3 of the Office Action, the Examiner rejects claims 24 – 32 under 35 USC 102(b) as being anticipated by Mori et al. (US Pat No 5,861,212). The Examiner states that Mori et al. show the use of sodium hydroxide, and the rejection is further maintained for the reasons of record set forth in previous Office actions.

Applicant points out that Mori et al. teach a double dip system of the type described in the Applicant’s original disclosure. On page 2 of the Application as filed, the Applicant describes a typical double dip system wherein a first dip typically comprises an isocyanate, an epoxy, a wetting agent, and a buffering material. A second dip is then

employed, typically comprising the resorcinol formaldehyde latex mixture. As Mori et al. state in column 6, lines 36 through 42, "the canvas can be dipped in an isocyanate solution, an epoxy resin solution or a mixed solution thereof, followed by drying, prior to the treatment with the adhesive composition" (emphasis added). The adhesive composition was defined by Mori et al. in column 4, lines 60 through 63 as comprising "(A) a latex of a carboxyl group-containing highly saturated nitrile conjugated diene copolymer rubber, (B) a resorcinol-formaldehyde resin, and (C) an aromatic epoxy resin. This is the prototypical double dip system as disclosed by the applicant: first treating with the isocyanate/epoxy solution, then followed by an RFL dip.

As stated by the Applicant, double dip systems and single dip systems are totally different. As such, prior art that relates to one of those systems cannot be used to anticipate or obviate a claim that is directed to the other system. The two simply cannot be combined. As such it is submitted that the current rejection has been traversed.

On page 3 of the Office Action, the Examiner rejects claims 24 – 26 and 28 – 32 under 35 USC 103(a) as being unpatentable over Japanese Patent No. 10-25666, Afdermarsh, Jr., Takata, Imai et al. and Japanese Patent Nos. 11-286875, 9-12997, 10-46475, 2000-8280, 62-276091 and 10-212674 in view of Mori et al.

With regard to Japanese Patent No. 10025666, the Examiner states that mixture (A) contains a rubber latex having RFL and an epoxy. The Japanese reference is directed at an adhesive composition for aromatic polyamides (nylons). In addition to polyepoxides and RFL, it requires a triazine compound and ethyleneimine. The polyamide fiber having RFL, polyepoxide, triazine compound blocked polyisocyanate and ethyleneimine provides superior bonding of the polyamide fiber to the rubber (according to the Japanese reference). There is no teaching that a simple epoxy/RFL mixture would give good adhesion with polyester. Claim 1 discloses a composition consisting essentially of epoxy and RFL as a mixture to provide good adhesion with polyester fibers. Lastly, the Japanese

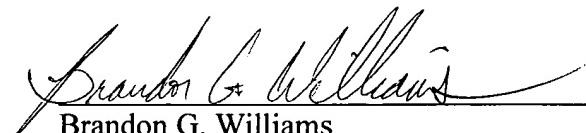
reference discloses compositions having up to 20-weight % of epoxy resins in the RFL. This is significantly higher than the composition of the present invention which calls for 2 – 12 weight%.

As stated in a previous office action, the Examiner states that Aufdermarsh, Jr., Takata et al., Imai et al. and the Japanese patents set forth single dip adhesive compositions composed of an epoxy resin and an RFL latex containing rubber. The Examiner states that the claimed amount of epoxy resin is not recited. The Examiner concludes that Mori et al. teaches from 1.5 – 16% by weight epoxy resin. The Examiner also states that Japanese reference '666 teaches the inclusion of from 8.3 – 16.4% by weight of epoxy resin. The Examiner concludes that it would have been obvious to employ the epoxy resin of Aufdermarsh, Jr., Takata et al., Imai et al. and the Japanese patents in proportion with the ranges of Mori et al, and Japanese '666 in order to improve abrasion resistance and adhesion of the fibers to the rubber.

Again, the Examiner is trying to combine single dip and double dip systems to make the current rejection. This simply is not possible. There is no indication in the prior art that the concentrations employed in a double dip system can be successfully copied into a single dip system. Indeed, applicant realizes the differences in component concentrations in typical single and double dip systems on page 2 of the application as filed. One of ordinary skill in the art would likewise recognize that the component concentrations in a single dip system would likely not have the desired adhesive characteristics when employed in a double dip system. Likewise, the concentrations of a double dip system could not be imposed to a single dip.

In view of the foregoing amendments to the claims and in light of the remarks made herein, it is submitted that the present application is now in condition for allowance, and such is earnestly solicited.

Respectfully submitted,



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